Please join us as Dr. Carlos Lavernia presents:

**Trunnionosis in Total Hip Arthroplasty**

*When: OCT 20th @ 2:15 PM
Where: MEA 202
Refreshments will be served*

**Bio:**

Carlos J. Lavernia, MD, FAAOS, orthopedic surgeon and biomedical engineer holds academic appointments as Voluntary Professor of Orthopedic Surgery at the University of Miami School of Medicine, Clinical Professor in the Department of Surgery, Division of Orthopedic Surgery at NOVA Southeastern University, and Courtesy Professor in Materials Science and Engineering at Florida International University. Dr. Lavernia completed a General Surgery internship and an Orthopedic Surgery residency at the University of California, San Diego and a Lower Extremity Reconstruction Fellowship at Johns Hopkins School of Medicine. He is certified by the American Board of Orthopedic Surgery. Throughout his career, Dr. Lavernia has developed hip and knee implants and conducted numerous studies in the field of orthopaedics. He has written many book chapters and has published over 300 abstracts and peer reviewed articles. These have been published in prestigious journals, including Clinical Orthopedics and Related Research, The Journal of Arthroplasty, Journal of Bone and Joint Surgery and International Orthopedics. Dr. Lavernia has received numerous awards and recognitions. In his spare time, Dr. Lavernia has performed numerous joint replacements and other orthopedic surgeries as part of Operation Walk, a private, non-profit, volunteer medical service organization which provides free surgical treatment for patients in developing countries and the United States of America, improving the lives of underprivileged patients in Latin America and the US.

**Abstract:**

Trunnions were introduced to hip surgery in order to minimize inventories and optimize the mechanics of hip implants. Currently over 1 million hips are implanted every year. Trunnion corrosion has been the source of major problems. The etiology of clinically relevant trunnion corrosion remains to be fully understood, but appears to be multi-factorial with synergy among implant-based, surgeon-based, and patient-based factors. Trunnion corrosion causing an adverse local tissue reaction manifests as delayed onset of groin, buttock, or thigh pain. Trunnionosis is probably underreported since it often causes osteolysis and loosening. Measurement of serum cobalt and chromium ions and advanced cross-sectional imaging, including metal artifact reduction sequence magnetic resonance imaging, can aid in diagnosis. Revision for trunnion corrosion-induced ALTR can often be accomplished with a head and liner exchange, with retention of the acetabular and femoral components. Engineers and surgeons should be aware of implant recalls and be cognizant of ongoing litigation against implant manufacturers. Surgeons and engineers should strive to standardize angle and type of tapers in hip replacement surgery.